

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018733**Date Inspected:** 11-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Zhu Zhong Hai.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT

**OBG TRAL ASSEMBLY**

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as OBG Traveler Rail. The weld designations reviewed are as follows.

TR5B-PP095-003, TR5B-PP097-003, TR5B-PP105-003, TR6A-PP100-001,  
TR6A-PP102-001, TR6A-PP104-001, TR6A-PP106-001

NDT Notification No-07736

This QA Inspector observed the following work in progress:

**OBG TRIAL ASSEMBLY**

OBG Segment 12AE-12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 Perform Shielded Metal Arc

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## WELDING INSPECTION REPORT

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Welding (SMAW) on OBG segment 12AE + 12BE edge plate to Edge plate joint Cross beam side. Joint identified as OBE12-001. ZPMC QC Identified as Wang Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. For more information see below attached picture number 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040320 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AE + 12BE edge plate to Edge plate joint Bike path side. Joint identified as CA6502-007. ZPMC QC Identified as Wang Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

### Segment 11EE Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 047353 Perform Flux Core Arc Welding (FCAW) on OBG segment 11EE Bottom plate to Side plate joint cross beam side. Joint identified as SEG074A-011. ZPMC QC Identified as Liu Hua Jie with temporary welding repair report WRR-B-WR 18688. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-1G (1F)-ESAB-Repair-FCM. For more information see below attached picture number 2.

### OBG U Rib Splice plate:

This QA Inspector observed ZPMC qualified welding personnel identified as 049220 Perform Flux Core Arc Welding (FCAW) on OBG U rib splice plate. Joint identified as UPSL1-658-001, 002. ZPMC QC Identified as Wang Zhu. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB.

### OBG Segment 12AW-12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 040656 Perform Shielded Metal Arc Welding (SMAW) on OBG Edge plate 'I' rib holdback. Joint identified as EP3010-001-010, 012. ZPMC QC Identified as Wang Zhu. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656 Perform Shielded Metal Arc Welding (SMAW) on OBG Edge plate 'I' rib holdback. Joint identified as EP3011-001-006, 008. ZPMC QC Identified as Wang Zhu. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2114-FCM-1.

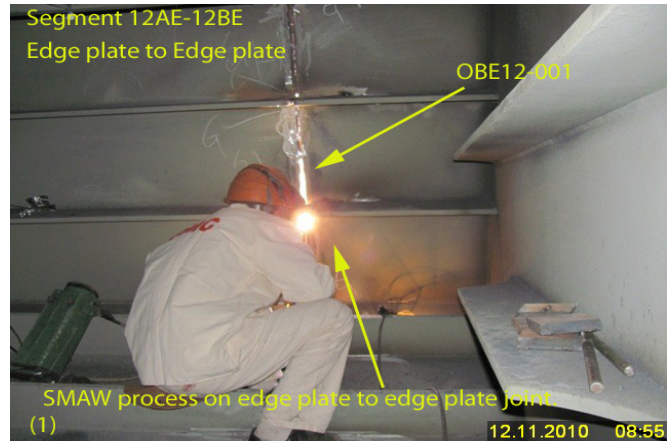
Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone :150-0042-2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Gaikwad,Shailesh

Quality Assurance Inspector

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**Reviewed By:** Carreon,Albert

QA Reviewer